

CLAIMS

I claim:

1. A subsurface irrigation system including at least one water distributing unit in a form of square mesh. Each water distributing unit adapted to irrigate a unit area having a unit length and a unit width and each water distributing unit comprising:

a) a water emitting conduits buried at an emitting depth below the surface of the unit area with a substantially continuous and homogeneous layer. The water emitting conduits being capable of receiving water from a water supply line and emitting the water at a plurality of emitting locations along its length; and

(b) a sleeve of water absorbent material enveloping water emitting conduits along their entire length capable of absorbing water from emitting locations; or

(c) a sleeve of water absorbent material capable of emitting water and enveloping a spiral along its entire length; or

(d) a water emitting conduits made of absorbent material capable of emitting water along its entire length.

2. The water distributing unit of claim 1 is made up of plurality of single cells that irrigate a single cell coverage zones.

3. The single cell of claim 1 and 2 is made up of water emitting conduits that irrigate a single cell coverage zone.

4. The water emitting conduits of claim 1 and 3 have a generally circular transverse cross sectional shape.

5. The water emitting conduits of claim 1 and 3 are covered with or made of porous and permeable material along its entire length.

6. A method of irrigating a lawn area with a water distributing unit buried at an emitting depth under the surface of the lawn area and extending along a length thereof, the lawn area having a lawn width and a lawn length and the method comprising the steps of:

(a) blocking downward movement of water through absorption by absorptive material at emitting locations and throughout the emitting conduits

(b) emitting water at a plurality of emitting locations along the length of the water emitting conduits until the entire volume of soil within the water distributing unit area is substantially saturated; and

(c) continuing to emit water at the plurality of emitting locations after the entire volume of soil within the water distributing unit area is substantially saturated with water, and until the entire volume of soil in the lawn area above the lawn root zone is substantially saturated.